

***What Is Claimed Is:***

1        1. A method for valuating natural gas futures and options contracts using  
2                  weather-based metrics, comprising the steps of:

3                      (1) receiving an input from a user indicative of the number of monthly  
4                  gas contracts desired for a period of time;

5                      (2) receiving historical weather information for at least one basket of  
6                  cities during said period of time;

7                      (3) receiving future weather information for said basket of cities during  
8                  said period of time;

9                      (4) receiving historical natural gas inventory information for said  
10                 basket of cities during said period of time;

11                      (5) receiving historical gas futures contract price information for said  
12                 period of time;

13                      (6) applying a series of regression analyses to obtain a predicted  
14                 baseline value for each of the monthly gas contracts within said period using said  
15                 received historical weather, future weather, historical natural gas inventory, and  
16                 historical gas futures contract price data;

17                      (7) receiving live exchange data which indicates the current price for  
18                 each of the monthly gas contracts within said period of time;

19                      (8) applying a series of recommendation rules to said baseline value,  
20                 using said received live exchange data; and

21                      (9) providing said user with a recommendation for each of the monthly  
22                 gas contracts within said period of time, wherein said recommendation reflects  
23                 said user inputted desired number of contracts.

1        2.     The method of claim 1, wherein said series of regression analysis applied  
2              in step (6), comprises the steps of:

3              (a)    performing a linear regression of said historical weather  
4              information and said historical natural gas inventory information; and

5              (b)    performing a multi-variate regression of said historical gas futures  
6              contract price information, said historical weather information and said historical  
7              natural gas inventory information.

1        3.     The method of claim 1, wherein said series of recommendations provided  
2              in step (9) includes at least one of the following:

- 3              (i)    Strong Buy;  
4              (ii)   Buy;  
5              (iii)   Buy a Call;  
6              (iv)   Write a Put;  
7              (v)   Sell; and  
8              (vi)   Strong Sell.

1        4.     A system for valuating natural gas futures and options contracts using  
2              weather-based metrics, comprising:

3              a weather history database that stores historical weather information for at  
4              least one basket of cities;

5              a weather forecast database that stores future weather information for said  
6              basket of cities;

7              an inventory database that stores historical natural gas inventory  
8              information for at least said basket of cities;

9              a price database that stores historical natural gas futures prices information;

10              at least one workstation that allows a user to specify inputs that affect the  
11              value of the gas futures and options contracts; and

12              at least one trading server, responsive to said workstation and connected  
13              to said weather history database, said weather forecast database, said inventory

14 database, and said price database, that applies a pricing model to valuate gas  
15 futures and options contracts using said specified inputs from said user;

16 whereby the system provides assistance to said user in reaching  
17 buying/hedging decisions in trading gas futures and options contracts.

1 5. A computer program product comprising a computer usable medium  
2 having computer readable program code means embodied in said medium for  
3 causing an application program to execute on a computer that performs valuations  
4 of natural gas futures and options contracts using weather-based metrics, said  
5 computer readable program code means comprising:

6 first computer readable program code means for causing the computer to  
7 receive an input from a user indicative of the number of monthly gas contracts  
8 desired for a period of time;

9 second computer readable program code means for causing the computer  
10 to receive historical weather information for at least one basket of cities during  
11 said period of time;

12 third computer readable program code means for causing the computer to  
13 receive future weather information for said basket of cities during said period of  
14 time;

15 fourth computer readable program code means for causing the computer  
16 to receive historical natural gas inventory information for said basket of cities  
17 during said period of time;

18 fifth computer readable program code means for causing the computer to  
19 receive historical gas futures contract price information for said period of time;

20 sixth apply a series of regression analyses to obtain a predicted baseline  
21 value for each of the monthly gas contracts within said period using said received  
22 historical weather, future weather, historical natural gas inventory, and historical  
23 gas futures contract price data;

24           seventh computer readable program code means for causing the computer  
25        to receive live exchange data which indicates the current price for each of the  
26        monthly gas contracts within said period of time;

27           eighth computer readable program code means for causing the computer  
28        to apply a series of recommendation rules to said baseline value, using said  
29        received live exchange data; and

30           ninth computer readable program code means for causing the computer to  
31        provide said user with a recommendation for each of the monthly gas contracts  
32        within said period of time, wherein said recommendation reflects said user  
33        inputted desired number of contracts.

6.       The computer program product of claim 5, wherein said sixth computer  
readable program code means comprises:

10           tenth computer readable program code means for causing the computer to  
11        perform a linear regression of said historical weather information and said  
12        historical natural gas inventory information; and

13           eleventh computer readable program code means for causing the computer  
14        to perform a multi-variate regression of said historical gas futures contract price  
15        information, said historical weather information and said historical natural gas  
16        inventory information.